

PATENT SPECIFICATION

DRAWINGS ATTACHED

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COMPLETE SPECIFICATION

Improvements in or relating to Coffee Making Machines.

We, OFFICINE FAEMA S.P.A., a properly constituted Company in conformity with Italian law, of Via Ventura, 5-Milano, Italy, do hereby declare the invention, for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:—

This invention concerns coffee making machines, particularly for making the so called "cream coffee." In order to obtain at home, or in small public houses "cream coffee," that is coffee having particular features, that is coffee having a thick superficial layer of yellow foam and sometimes referred to as "expresso" coffee made to-day in coffee bars supplied with modern coffee machines, and which meets with the public favour, there have been proposed and put into use various types of machine and of apparatus which imitates, on a reduced scale, the machines of the large coffee bars.

These so called household machines are, therefore, heavy, expensive to purchase and to be operated, encumbering, and difficult to handle.

This invention has for its object the provision of a machine for the small requirements of a household or small coffee bar which does not suffer from the disadvantages above referred to.

The invention will be described further, by way of example, with reference to the accompanying drawings in which:—

Fig. 1 is a side view, partially in section, of one form of the invention.

Fig. 2 is a front view, partially in section, of the arrangement of Fig. 1.

Fig. 3 is a plan view of the arrangement of Figs. 1 and 2.

Fig. 4 is a front view of a second preferred form of machine and

Fig. 5 is a view from above of a container for coffee and infusing water, parts being removed for clarity.

Referring firstly to Figs. 1, 2 and 3, 1 designates a base, and 2 a body secured to the

base by means of a column 3, which latter is secured to the base.

The body 2 is provided with a cylindrical cavity 19, into which a container 16, whose upper open orifice presents a flanged edge 20, is located. There being, for this purpose a ledge 18 within the cavity 19.

Above the body 2, as shown, is a horizontally movable body 5 which pivots around a vertical pivot 4. Within the body 5 is a cylindrical cavity 15 which is open at its lower end. Within the cavity 15 is a piston 13 which may move to a position below the body 15. The piston 13 is suspended by means of two pairs of rods 10 and 10', on two levers 6 and 6', these latter being linked at 7 to each other and to the body 5 itself.

The container 16 has an apertured base 21 and under the base 21 is a hemispherical cap 24 which is supplied with outlets 25 and 25'. A douche-disk 22 is located within the container 16 and is to be controlled by means of pin 23.

A bell-shaped cap 43 is used to enclose the system of levers or rods controlling the piston.

The movable body 5 occupies, in Figs. 1 and 2, in respect of immovable body 2, the position in which cavity 19 of body 2 and the one 15 of body 5 are co-axial. The inside diameter of the container 16 is such that it forms a continuation of the cavity 15 in such a way that piston 13 may move into the container 16.

The stroke of the piston is such that the piston may be moved almost to the bottom of the cavity 16 and when in this position the pin 23 enters into a corresponding blind hole 14 in the piston.

By rotation around pivot 4, the movable body 5 may be displaced into the position shown in chain line in Fig. 3 in which the upper orifice of the container 16 is open.

In use with the movable body 5 in the chain line position the douche-disk 22 can be removed and powdered coffee placed into the container as desired, the douche-disk 16 is

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replaced and by pressing it down the layer of powdered coffee is compressed. Boiling water is introduced into the container and, after lifting levers 6 and 6', the movable body 5 is moved into the position of Figs. 1 and 2. By depressing the levers into the position indicated in chain line in Fig. 2 the prepared drink flows from outlets 25 and 25' into cups placed on the base, as shown in Figs. 1 and 2.

In the modification shown in Figs. 4 and 5, there is provided a hollow body 36, in the cavity 34 of which is located a piston 35 suspended for movement in the cavity. The device is supplied with two legs 31 diametrically opposed, whose lower ends are connected to a bearing plate 44 which acts as a base and as a platform, to support the cups.

The container 26, intended to include the powdered coffee and the infusion water is, in this case a movable part and is secured in position by means of a device of the bayonet type, without requiring packings at the upper orifice of the cavity of the body.

Container 26 is supplied with diametrically opposed radial tongues 27 which fit into corresponding grooves 28 made inside the upper ends of the legs 31 and with a radial handle 32 located on one of the tongues. In the position shown in Fig. 5 the container is in position and the handle lies against the corresponding leg.

In order to avoid thermic dispersions, the side wall of container 26 may be supplied with an insulating air gap. Within the container is a jacket 39 with an apertured base 40, within which a bored disk 30 provided with a peg 41 is located.

The way to use the machine is analogous to the one described previously.

When the container 26 is removed from the apparatus, with the jacket, and the douche-disk 30 is removed powdered coffee can be placed in the container and compressed with douche-disk 30. Boiling water is introduced into the container and the latter can be replaced into the device after lifting the levers 33, 33' to move the piston upwardly. Upon lowering the levers 33, 33' the drink, distributed by outlets 42 is received in cups, placed on the base plate. The rods 37 and 37' are provided with notches 38, 38' which, when the levers 33 and 33' are lifted, partially embrace the linking pivot of the levers themselves and thus a stop is provided for the levers when they are in the lifted position.

WHAT WE CLAIM IS:—

1. A coffee making machine, comprising a cylindrical body which is open at the base and is provided with a cavity in which a piston is axially movable and controllable by hand, the stroke of the piston being such that it may

project below and be entirely enclosed by a cylindrical container having an apertured base adapted to contain powdered coffee and hot water, said container being tightly fitted, in one position against the open end of the cylindrical body, to form a continuation thereof, adapted to receive the piston when the latter is in one position, either the body or the cylindrical container being secured to a support, the machine being preferably supplied with a cup holder plate or base with its own axis perpendicular to said plate.

2. A coffee making machine as claimed in claim 1 in which the container is supported by a small column secured to the base and the hollow body is pivotally mounted on said support, the axes of the support and the body being parallel to each other.

3. A coffee making machine as claimed in claim 1, characterized in that the hollow body is secured on a support comprising two legs which themselves are secured to a base, the space existing between the two legs being such that there can be provided a securing means for the container.

4. A coffee making machine as claimed in claim 3, characterized in that the container is applied to the hollow body by means of a bayonet coupling.

5. A coffee making machine as claimed in any one of claims 1 to 3, characterized in that the container has a double base interior, one of which is apertured and the second, outer, one is provided with outlets for distribution of prepared coffee.

6. A coffee making machine as claimed in any one of the preceding claims characterized in that the container is supplied with two diametrically opposed tongues and with a handle secured to one of the tongues.

7. A coffee making machine as claimed in any one of the preceding claims, characterized in that the container is supplied with a lateral air gap for thermic insulation.

8. A coffee making machine as claimed in any one of the preceding claims, characterized in that the piston is manually operable by two levers movable in a parallel symmetrical plane, the levers being pivoted on the body and being capable of operating the piston by means of connecting rods.

9. A coffee making machine substantially as hereinbefore described with reference to and as illustrated in Figs. 1 to 3 or 4 and 5 of the accompanying drawings.

For the Applicant:—
WILSON, GUNN & ELLIS,
Chartered Patent Agents,
57, Market Street,
Manchester, 1.

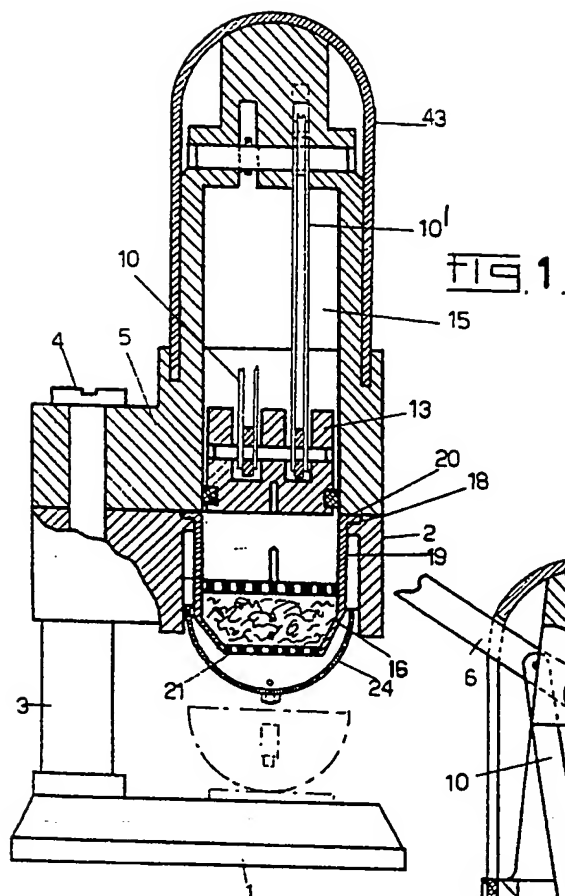


FIG. 2.

